

REMARKS

Applicant appreciates the Examiner consideration of the claims and determination of allowable subject matter. The following remarks are respectfully presented.

Drawings

The Examiner has objected to the drawings. The Examiner noted that the drawings fail to show a ring meeting the limitations of claims 1 or 2 – in that a ring having at least 2 or 3 ridges is not shown. However, FIG. 4 illustrates an exemplary embodiment of the invention utilizing a ring having at least 2 ridges. FIG. 5 illustrates an exemplary embodiment of the invention utilizing a ring having at least 3 ridges. Therefore, Applicant respectfully submits that the drawings illustrate the features specified in the claims and respectfully requests that the Examiner withdraw this objection.

Claim 8

The Examiner has objected to claim 8 but has indicated that claim 8 would be allowable if rewritten into independent form to include the limitations of the base claim and intervening claims. Accordingly, Applicant has rewritten claim 8 to include the limitations of independent claim 1 – the claim from which dependent claim 8 directly depends. The Examiner's determination of allowable subject matter with respect to claim is appreciated.

35 U.S.C. § 102(e)

The Examiner rejected claims 1, 7, and 9 under 35 U.S.C. § 102(e) as being clearly anticipated by Yukawa et al. As part of the rejection, the Examiner referred to figure 27 of this reference. Applicant respectfully traverses this rejection.

Yukawa et al. indicates the use of a noise damper 5 that includes one or more flaps 7 created by a U-cut 14 in the damper 5. See Col. 3, lines 16-45. The flaps 7 are initially flat against the rim and move into position during the rotation of the tire due to centrifugal forces. Id. at Col. 3, lines 20-22. The concept indicated by Yukawa et al. is to dampen noise by blocking the annular tire hollow. Col. 1, lines 34-40. The blocking is to be accomplished by blockade area Ab, which is the area of flap 7 that is moved into a plane normal to the circumference of the rim by the centrifugal forces. Col. 4, lines 36-50. Note that once the flaps 7 are in this operating position, the flaps 7 have no circumferentially-oriented surface. The only surface is blockade area Ab, which is normal to the circumference of the rim during operation. Also, the dampers 5 only form flaps 7 – no ridges are formed regardless of whether the tire is rotating.

In contrast, the present invention does not use flaps. Claims 1 and 10 each require at least two ridges – which are structurally distinct from flaps. For example, as shown in the figures, each ridge provides a circumferentially-oriented surface regardless of whether the tire is rotating. The specification describes the importance of this aspect of the invention. By way of example, paragraph 27 of the specification states:

Figure 2 shows ridges 44 that are relatively much longer than the gaps 46. This is believed to facilitate the wave interrupting capability by having a relatively long dwell time of the ridge at the wave peak maximum and minimum. The ridges 44 have substantially equal length. Alternatively, the ridges and gaps may be of a single substantially equal length.

The dwell time is created by the circumferentially-oriented surface inherent to each ridge. The amount of dwell time can be possibly modified through changing the relative size of the ridges and gaps. Again, no such surface or modification is disclosed by Yukawa et al. because Yukawa et al. indicates the use of flaps rather than ridges; such flaps do not form a ridge.

Claims 7 and 9 also require ridges rather than flaps because each of these claims ultimately depends from claim 1, which includes the ridge limitation.

Therefore, for these reasons, Applicant respectfully submits that claims 1, 7, and 9 are not anticipated by Yukawa et al. The Examiner's reconsideration and allowance of these claims is respectfully requested.

Claims Rejections – 35 U.S.C. § 103

Claims 2-6 (each of which ultimately depend from claim 1) and claim 10 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Yukawa et al. However, as previously discussed, Yukawa et al. lacks any teaching of a ridge as required by claim 1 and claim 10. Instead, Yukawa et al. indicates the use of flaps. Therefore, for the reason previously described, Applicant respectfully traverses the Examiner's rejection and requests reconsideration and allowance of claims 2-6 and 10.

Information Disclosure Statement

Along with payment of the appropriate fee, Applicant has separately submitted an information disclosure statement.

Applicants respectfully submit that all claims submitted herein are allowable and that the application is in condition for allowance. Favorable action thereon is respectfully requested. The Examiner is encouraged to contact the undersigned at his convenience to resolve any remaining issues.

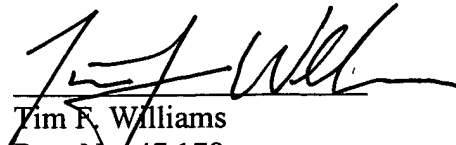
Fees for an extension of time to respond to this action are included. However, if any additional fees are required to obtain the entry of this response, the undersigned hereby petitions

the Commissioner to grant any necessary time and extension and authorize its charging deposit account no. 04-1403 for any such fee not submitted herewith.

Respectfully submitted,

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Date


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